

REMARKS

The Official Action mailed November 14, 2006, and the Advisory Action mailed March 1, 2007, have been received and their contents carefully noted. Filed concurrently herewith is a *Request for One Month Extension of Time*, which extends the shortened statutory period for response to March 14, 2007. Also, filed concurrently herewith is a *Request for Continued Examination*. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed May 21, 1999; April 14, 2004, March 23, 2006; May 12, 2006; and June 7, 2006.

Claims 1, 3-8, 10, 12-14, 16, 17, 19-21, 23, 25-33, 35 and 37-44 were pending in the present application prior to the above amendment. The features of dependent claims 39-44 have been incorporated into claims 1, 8, 14, 21, 27 and 33, respectively; claims 1, 8, 14, 21, 27 and 33 have been further amended to better recite the features of the present invention; and claims 5, 6, 12, 19, 21, 25, 30, 31, 33 and 37 have been amended to correct minor informalities and for consistency. Accordingly, claims 1, 3-8, 10, 12-14, 16, 17, 19-21, 23, 25-33, 35, 37 and 38 are now pending in the present application, of which claims 1, 8, 14, 21, 27 and 33 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Advisory Action and Paragraph 3 of the Official Action continue to reject claims 1, 3-6, 8, 10, 12, 14, 16, 17, 19, 21, 23, 25, 27-31, 33, 35, 37 and 39-44 as obvious based on the combination of U.S. Patent No. 5,811,837 to Misawa, U.S. Patent No. 6,229,513 to Nakano and U.S. Patent No. 4,645,947 to Prak. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or

motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims, as amended. Independent claims 1, 8, 14, 21, 27 and 33 have been amended to recite that a first signal has a reversed phase relation with a second signal and that a length of a phase difference is at least a signal rise time period (t_r) of the first signal or a signal fall time period (t_f) of the first signal, and shorter than a half of a signal holding time period (t_c). For the reasons provided below, Misawa, Nakano and Prak, either alone or in combination, do not teach or suggest the above-referenced features of the present invention.

The Official Action asserts that "Fig. 5 of Prak shows a length of the phase difference is at least a signal rise time period of the first signal or a signal fall time period of the first signal, and shorter than a half of a signal holding time period" (page 5, Paper No. 20061031). However, Misawa discloses CL and \overline{CL} , which is the inverted signal of CL . Further, Misawa discloses that the rising edge of CL corresponds to the trailing edge of \overline{CL} and the rising edge of \overline{CL} corresponds to the trailing edge of CL (column

12, lines 29-32) in order to reduce "noise in the form of spike synchronizing with the clock signal [that] is unintentionally added to the video signal" (column 12, lines 8-10). The Official Action has not demonstrated why one of ordinary skill in the art at the time of the present invention would have been motivated to change Misawa away from its intended purpose as described at column 12, lines 29-32. That is, the Official Action has not demonstrated why Misawa would be modified such that the rising edge of CL would not correspond to the trailing edge of \overline{CL} and the rising edge of \overline{CL} would not correspond to the trailing edge of CL .

Prak merely discloses that Phase 1 is delayed with respect to Phase 2 (Figure 5). However, Phase 2 is not an inverted signal of Phase 1. Although the Phase 1 Complement is an inverted signal of Phase 1, the Phase 1 Complement is not delayed with respect to Phase 1. Rather, the Phase 1 Complement corresponds with Phase 1. Therefore, Prak does not teach or suggest that a first signal has a reversed phase relation with a second signal and is delayed with respect to the first signal.

Nakano does not cure the deficiencies in Misawa and Prak. Nakano is relied upon to allegedly teach a control circuit for generating a clock signal and a video signal processing circuit (page 3, Paper No. 20061031). However, Misawa, Nakano and Prak, either alone or in combination, do not teach or suggest that a first signal has a reversed phase relation with a second signal and that a length of a phase difference is at least a signal rise time period of the first signal or a signal fall time period of the first signal, and shorter than a half of a signal holding time period.

Since Misawa, Nakano and Prak do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained.

Furthermore, there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Misawa, Nakano and Prak or to combine reference teachings to achieve the claimed invention. MPEP § 2142 states that the examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. It is respectfully

submitted that the Official Action has failed to carry this burden. While the Official Action relies on various teachings of the cited prior art to disclose aspects of the claimed invention and asserts that these aspects could be used together, it is submitted that the Official Action does not adequately set forth why one of skill in the art would combine the references to achieve the features of the present invention.

The test for obviousness is not whether the references "could have been" combined or modified as asserted in the Official Action, but rather whether the references should have been. As noted in MPEP § 2143.01, "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) (emphasis in original). Thus, it is respectfully submitted that the standard set forth in the Official Action is improper to support a finding of *prima facie* obviousness.

The Official Action concedes that Misawa as modified by Nakano does not teach that the control circuit has a delay circuit for producing a phase different in the second signal (reversed clock signal) with respect to the phase of the first signal" (page 3, Paper No. 20061031). The Official Action relies on Prak to allegedly teach "a control circuit (clock driver circuit) [having] a delay circuit (12, 13) for producing the phase difference in the second signal with respect to the phase of the first signal (see Fig. 5)" (Id.). However, as noted above, Prak does not teach or suggest that a first signal has a reversed phase relation with a second signal and is delayed with respect to the first signal. The Official Action does not make clear why one of ordinary skill in the art at the time of the present invention would have looked to Prak to modify the clock signal in Misawa, which clearly states that the rising edge of *CL* corresponds to the trailing edge of \overline{CL} and the rising edge of \overline{CL} corresponds to the trailing edge of *CL*. That is, Prak does not teach or suggest applying phase delay between the Phase 1 signal and the Phase 1 Complement signal. Further, there is no motivation for applying Prak's phase delay 60, which is between Phase 1 and Phase 2, to Misawa's *CL* and \overline{CL} .

Therefore, the Applicant respectfully submits that the Official Action has not provided a proper or sufficient suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Misawa, Nakano and Prak or to combine reference teachings to achieve the claimed invention.

In the present application, it is respectfully submitted that the prior art of record, either alone or in combination, does not expressly or impliedly suggest the claimed invention and the Official Action has not presented a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

For the reasons stated above, the Official Action has not formed a proper *prima facie* case of obviousness. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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